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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,740	09/05/2003	Toshisada Koyama	051319/0057	9074

29619 7590 07/18/2005

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EXAMINER

TUPPER, ROBERT S

ART UNIT	PAPER NUMBER
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2652

DATE MAILED: 07/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/656,740	KOYAMA, TOSHISADA	
	Examiner	Art Unit	
	Robert S. Tupper	2652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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1. Prosecution on the merits of this application is reopened on claims 1-6 considered unpatentable for the reasons indicated below:

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by ROBINSON et al (5,529,404).

Note figure 4 and column 5 lines 1-33. ROBINSON et al shows a pivot assembly (60) having two ball bearings (71,78) with outer rings (races – not numbered), a shaft (74), an inner wall part (spacer 69) contacting the outer races, and a sleeve (80) spanning both outer races and contacting the inner wall part/spacer. The sleeve is laser welded to the outer races of the bearings (see column 5 lines 24-25).

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

In claim 2 on both lines 4 and 5, "said outer ring" is indefinite. There are two ball bearings and two outer rings. It is unclear what the positioning of the elements is.

In claim 5 on lines 3-4 and 5, "said outer ring" is indefinite. There are two ball bearings and two outer rings. It is unclear what the positioning of the elements is.

In claim 6, on line 2, "the outer ring of the bearing" is indefinite. There are two ball bearings and two outer rings. It is unclear what the positioning of the elements is.

6. Claim 1 is objected to because of the following informalities:

On line 8, "each of" should be inserted before "said" to clearly indicate that the inner wall part extends to the outer circumference of both outer rings.

Appropriate correction is required.

7. Claims 2-6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter:

Concerning claim 2, the prior art does not teach or suggest a pivot assembly for a hard disk drive having two ball bearings including outer races, a shaft to which the ball bearings are mounted, one at each end thereof, a spacer located around the shaft with its outer circumference matching that of the outer circumference of the outer races of

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the bearings, and a sleeve spanning the outer races of each bearing and mated with the spacer, where the sleeve has a concave part in its outer circumference with a bottom wall that is laser welded to the outer circumference of the outer races.


Concerning claim 5, the prior art does not teach or suggest a pivot assembly for a hard disk drive having two ball bearings including outer races, a shaft to which the ball bearings are mounted, one at each end thereof, a spacer located around the shaft with its outer circumference matching that of the outer circumference of the outer races of the bearings, and a sleeve spanning the outer races of each bearing and mated with the spacer, where the sleeve has a hole extending from its outer circumference to the outer circumference of the outer races and an edge part of the holes laser welded to the outer circumference of the outer races.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert S. Tupper whose telephone number is 571-272-7581. The examiner can normally be reached on Mon - Fri, 6:30 AM - 4:00 PM (first Fri off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on 571-272-7579. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Robert S Tupper  
Primary Examiner  
Art Unit 2652

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